# Viral ("Aseptic") Meningitis

# What is meningitis?

Meningitis is an illness in which there is inflammation of the tissues that cover the brain and spinal cord. Viral or "aseptic" meningitis, which is the most common type, is caused by an infection with one of several types of viruses. Meningitis can also be caused by infections with several types of bacteria or fungi. In the United States, there are between 25,000 and 50,000 hospitalizations due to viral meningitis each year.

# What are the symptoms of meningitis?

The more common symptoms of meningitis are fever, severe headache, stiff neck, bright lights hurting the eyes, drowsiness or confusion, and nausea and vomiting. In babies, the symptoms are more difficult to identify. They may include fever, fretfulness or irritability, difficulty in awakening the baby, or the baby refuses to eat. The symptoms of meningitis may not be the same for every person.

#### Is viral meningitis a serious disease?

Viral ("aseptic") meningitis is serious but rarely fatal in persons with normal immune systems. Usually, the symptoms last from 7 to 10 days and the patient recovers completely. Bacterial meningitis, on the other hand, can be very serious and result in disability or death if not treated promptly. Often, the symptoms of viral meningitis and bacterial meningitis are the same. For this reason, if you think you or your child has meningitis, see your doctor as soon as possible.

### What causes viral meningitis?

Many different viruses can cause meningitis. About 90% of cases of viral meningitis are caused by members of a group of viruses known as enteroviruses, such as coxsackieviruses and echoviruses. These viruses are more common during summer and fall months. Herpesviruses and the mumps virus can also cause viral meningitis.

#### How is viral meningitis diagnosed?

Viral meningitis is usually diagnosed by laboratory tests of spinal fluid obtained with a spinal tap. The specific cause of viral meningitis can be determined by tests that identify the virus in specimens collected from the patient, but these tests are rarely done.

## How is viral meningitis treated?

No specific treatment for viral meningitis exists at this time. Most patients completely recover on their own. Doctors often will recommend bed rest, plenty of fluids, and medicine to relieve fever and headache.

# How is the virus spread?

Enteroviruses, the most common cause of viral meningitis, are most often spread through direct contact with respiratory secretions (e.g., saliva, sputum, or nasal mucus) of an infected person. This usually happens by shaking hands with an infected person or touching something they have handled, and then rubbing your own nose or mouth. The virus can also be found in the stool of

persons who are infected. The virus is spread through this route mainly among small children who are not yet toilet trained. It can also be spread this way to adults changing the diapers of an infected infant. The incubation period for enteroviruses is usually between 3 and 7 days from the time you are infected until you develop symptoms. You can usually spread the virus to someone else beginning about 3 days after you are infected until about 10 days after you develop symptoms.

#### Can I get viral meningitis if I'm around someone who has it?

The viruses that cause viral meningitis are contagious. Enteroviruses, for example, are very common during the summer and early fall, and many people are exposed to them. However, most infected persons either have no symptoms or develop only a cold or rash with low-grade fever. Only a small proportion of infected persons actually develop meningitis. Therefore, if you are around someone who has viral meningitis, you have a moderate chance of becoming infected, but a very small chance of developing meningitis.

# How can I reduce my chances of becoming infected?

Because most persons who are infected with enteroviruses do not become sick, it can be difficult to prevent the spread of the virus. However, adhering to good personal hygiene can help to reduce your chances of becoming infected. If you are in contact with someone who has viral meningitis, the most effective method of prevention is to wash your hands thoroughly and often (see "Handwashing" in: "An Ounce of Prevention: Keeps the Germs Away" at

http://www.cdc.gov/ncidod/op/handwashing.htm). Also, cleaning contaminated surfaces and soiled articles first with soap and water, and then disinfecting them with a dilute solution of chlorine-containing bleach (made by mixing approximately ¼ cup of bleach with 1 gallon of water) can be a very effective way to inactivate the virus, especially in institutional settings such as child care centers. (See more about cleaning and disinfecting in general at http://www.cdc.gov/ncidod/op/cleaning.htm)

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